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9 **Number of Pages (including this page)**

Date: August 25, 2004

To: Examiner - Vartanian, Harry - Group Art Unit: 2634

Location: United States Patent and Trademark Office

Fax No.: 703/872-9306

From: Brian M. Mancini (Registration No. 39,288)

Subject: Serial No. 09/759,857- Miller et al.

MESSAGE:

Enclosed herewith, please find an AMENDMENT for filing in the below-identified application.

PLEASE GIVE THESE PAPERS TO:

EXAMINER:	Vartanian, Harry
GROUP ART UNIT:	2634
SERIAL NO.:	09/759,857
FILED:	01/12/2001
INVENTOR:	Miller et al.
ATTORNEY DOCKET NO.:	AP5077ES

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	Miller et al.	EXAMINER:	Vartanian, Harry
SERIAL NO.:	09/759,857	GROUP:	2634
FILED:	01/12/2001	CASE NO.:	AP5077ES

TITLED: Interface Circuit And Method For Digital Signals

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on August 25, 2004

Motorola, Inc.
Name of applicant, assignee, or Registered Representative

8/25/2004
Date

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AMENDMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated August 16, 2004 in the above captioned matter, please enter the following amendment and response:

Amendments to the Specification:

In the abstract on page 12, please amend the abstract as follows:

An interface circuit (100) and method for interfacing received digital signals ~~with,~~ relative to a first ground potential, ~~a bus, comprising: means (TxduC) for receiving digital signals,~~ for transmission on the bus, relative to a ~~first~~ second ground potential~~;~~. A transformer ~~means~~ (106) ~~for passing~~ passes edges of the received digital signals~~;~~. A Schmitt trigger ~~and reconstruction means~~ (110) ~~for reconstructing~~ reconstructs signals from the edges of signals passed by the transformer ~~means~~, so as to produce digital signals, for transmission on the bus, relative to ~~a~~ the second ground potential. ~~A similar circuit (CANL, 130, 134) interfaces, from the second ground potential to the first ground potential, signals received from the bus.~~ The ~~reconstruction means may use~~ Schmitt triggers~~, whose~~ bias points may be set by an oscillators incorporating ~~further~~ another Schmitt triggers~~s~~ (120~~, 142~~) located on the same semiconductor die to reduce temperature variability.

On page 4, please amend the paragraph starting at line 25 as follows:

Pulses (relative to earth potential) received from the TxduC terminal of the ECU 200 are differentiated by the capacitor ~~102~~ 104 to produce positive-going and negative-going spikes corresponding to the pulses' positive-going and negative-going transitions are passed by the transformer 106. The resulting signal (consisting of positive-going and negative-going spikes separated by a DC level) at the output winding of the transformer 106 is applied to the Schmitt trigger 110, in which a positive-going spike at its input causes its upper trigger level to be crossed (resulting in the output of the Schmitt trigger going low), and a negative-going spike at its input causes its upper lower trigger level to be crossed (resulting in the output of the Schmitt trigger going high). Thus the Schmitt trigger 110 reconstructs (from the pulse edge signal passed by the transformer 106) the pulse signal received at the terminal TxduC. However, it will be noted that whereas the pulse signal received at the terminal TxduC is relative to the earth potential (e.g., at the input winding of the transformer 106), the reconstructed pulse signal at the output of the Schmitt trigger 110 is relative to the datum voltage "0". Thus, the interface circuit 150 serves to isolate signals for transmission on the CAN bus 300 between the ground potential (earth) of the ECU 200 and the ground potential (datum voltage "0") of the CAN bus 300.